

CHAPTER 16

AN ACT concerning nuclear energy, and supplementing Title 48 of the Revised Statutes.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

C.48:3-87.3 Findings, declarations relative to nuclear energy.

1. a. The Legislature finds and declares that:

(1) Climate change is one of the greatest threats facing the State today and in the future. Reducing emissions of carbon dioxide, other greenhouse gases, and other pollutants by preserving and expanding zero-emission electricity generation within and outside the State is critical to mitigating the impacts of climate change.

(2) Nuclear power is a reliable, zero-emission source of energy that has supplied New Jersey's energy demands for decades.

(3) New Jersey has historically relied on a diverse mix of energy supply sources, including nuclear power, to meet the needs of its residents and businesses.

(4) Reducing emissions of carbon dioxide, other greenhouse gases, and other pollutants, and preserving and developing zero-emission electricity generation sources within and outside the State that currently provide electricity to customers in New Jersey, are critical to improving air quality for New Jersey residents.

(5) The Energy Master Plan of New Jersey, last updated in 2015, requires significant revisions to ensure that 100 percent of the State's electric energy needs are generated by clean energy sources by 2050, and any update to the Energy Master Plan by the State must include a focus on the expansion of renewable and zero-emission sources of energy.

(6) The existing renewable energy portfolio standard has been successful in promoting the growth of renewable energy generation to reduce air pollution in New Jersey; however, to achieve its near term environmental goals, New Jersey must expand its commitment to zero-emission energy generation and value the air quality and other environmental attributes of zero-emission generation sources that currently fall outside the scope of the existing renewable energy portfolio standard, including but not limited to nuclear power.

(7) Nuclear power generation is a critical component of the State's clean energy portfolio because nuclear power plants do not emit carbon dioxide, other greenhouse gases, or other pollutants; in addition, nuclear power is an important element of a diverse energy generation portfolio that currently meets approximately 40 percent of New Jersey's electric power needs.

(8) Several of the existing, licensed, and operating nuclear power plants within and outside the State that currently provide electricity to customers in New Jersey are at risk of abrupt retirement due to a variety of factors.

(9) The retirement of nuclear power generation will inevitably result in an immediate increase in air emissions within New Jersey due to increased reliance on natural gas-fired generation and coal-fired generation.

(10) Poor air quality has a disproportionate impact on the most vulnerable citizens of New Jersey including children, the elderly, and people living in poverty. Fossil-fuel power plants drive increases in pollutants like ground-level ozone, which aggravates respiratory illnesses for individuals with decreased lung function. Public health and environmental justice necessitate a reduction in these pollutants to protect the most vulnerable of our citizenry.

(11) As a coastal state, New Jersey is particularly exposed to many of the effects of global climate change, such as rising sea levels and more extreme storms. Many of New Jersey's most important commercial and tourism assets are located in coastal areas, and events like Superstorm Sandy have demonstrated the imminent and tangible threats that intense storms pose to New Jersey's economy and environment.

(12) Given the overwhelming scientific consensus that fossil-fuel use is causing potentially irreversible global climate change and the attendant environmental catastrophes, it is a moral imperative that the State invest in energy infrastructure within and outside the State that does not produce greenhouse gases.

b. The Legislature therefore determines that:

(1) The abrupt retirement of existing, licensed, and operating nuclear power plants within and outside the State that provide electricity to customers in New Jersey, and any concomitant increase in the proportion of New Jersey's electricity demand met by natural gas and coal, will result in a substantial increase in emissions of several serious pollutants, and associated adverse public health and environmental impacts. The pollutants resulting from increased fossil-fuel generation and drilling include emissions of carbon dioxide, methane, carbon monoxide, sulfur dioxide, particulate matter, volatile organic compounds, mercury, and nitrous oxides, and the creation of ozone.

(2) New Jersey is currently not projected to meet certain federal and State air quality standards and emissions level requirements, counties of the State are currently designated as nonattainment for the federal 8-hour Ozone National Ambient Air Quality Standard, and the abrupt retirement of nuclear power plants that serve New Jersey combined with increased reliance on natural gas-fired and coal-fired generation will substantially impede the State's ability to meet those federal and State air quality standards and emissions level requirements.

(3) In light of the primacy of natural gas use for heating in New Jersey, increased reliance on natural gas-fired generation will render the electric generation and delivery systems less resilient and more vulnerable to the impacts of extreme winter weather events, natural gas pipeline accidents, and other factors affecting the deliverability of natural gas to electric power generating stations in and around the State.

(4) The model of providing credits to zero- or low-emission energy generation sources as compensation for their environmental attributes has proven successful for Class I and Class II renewable energy sources, which receive renewable energy certificates, and solar electric power generators, which receive solar renewable energy certificates.

(5) A program that recognizes and compensates nuclear energy generators in a manner similar to other non-emitting energy generation resources to the extent required to prevent the loss of nuclear energy, subject to independent review as provided in section 3 of this act, which the State's residents and businesses rely on for approximately 40 percent of their electricity needs, could, in the absence of equally or more cost-effective clean energy alternatives, further the State's interest in environmental protection and maintaining a diverse mix of energy sources.

(6) While recognizing the importance of nuclear energy generation, the State must also commit to the deployment of renewable and zero-emission energy to address climate change, drive economic development, and create new employment opportunities.

(7) In order to meet the goals under the "Global Warming Response Act," P.L.2007, c.112 (C.26:2C-37 et seq.), to reduce greenhouse gas emissions 80 percent by 2050, it will be necessary to significantly reduce emissions from the electric power generation sector. This will require reducing the State's heavy reliance on natural gas for electric power generation, the primary source of emissions from the electric power generation sector.

(8) The zero emission certificate program set forth in this act is structured such that its costs are guaranteed to be significantly less than the social cost of carbon emissions avoided by the continued operation of selected nuclear power plants, ensuring that the program does not place an undue financial burden on retail distribution customers. The social cost of carbon, as calculated by the U.S. Interagency Working Group on the Social Cost of Carbon

in its August 2016 Technical Update, is an accepted measure of the cost of carbon emissions. Carbon emissions avoided by selected nuclear power plants are but one component of their emissions avoidance benefits.

C.48:3-87.4 Definitions relative to nuclear energy.

2. As used in this act:

“Board” means the New Jersey Board of Public Utilities or any successor agency.

“Electric public utility” shall have the same meaning as provided in section 3 of P.L.1999, c.23 (C.48:3-51).

“Eligibility period” means the period of time, measured in energy years, during which a selected nuclear power plant may receive zero emission certificates pursuant to section 3 of this act.

“Eligible nuclear power plant” means a nuclear power plant certified by the board to allow it to be selected to participate in the program established pursuant to section 3 of this act.

“Emissions avoidance benefits” means the benefits associated with the preservation of better air quality and other environmental attributes caused by the production of electric energy from a selected nuclear power plant, as well as the reduction in damage that would otherwise be caused by carbon dioxide or other greenhouse gases or other pollutants emitted but for the production of electric energy from a selected nuclear power plant. Such damage threatens massive economic and lifestyle disruption, and includes but is not limited to a contribution to sea level rise, heat waves, more frequent and severe occurrence of extreme weather events, and damage to agriculture, water resources, public health, energy and communication systems, and the natural ecosystems that define and support communities.

“Energy year” or “EY” shall have the same meaning as provided in section 3 of P.L.1999, c.23 (C.48:3-51).

“Nuclear power plant” means an individual electric generating unit utilizing nuclear fuel to produce electric power.

“Selected nuclear power plant” means an eligible nuclear power plant selected by the board to participate in the program established pursuant to section 3 of this act.

“Zero emission certificate” or “ZEC” means a certificate, issued by the board or its designee, representing the fuel diversity, air quality, and other environmental attributes of one megawatt-hour of electricity generated by an eligible nuclear power plant selected by the board to participate in the program established pursuant to section 3 of this act.

C.48:3-87.5 Information included with application; certification.

3. a. As part of an application submitted to the board pursuant to subsection c. of this section, a nuclear power plant seeking to participate in the program established by this act shall provide to the board any financial information requested by the board pertaining to the nuclear power plant, including, but not limited to, certified cost projections over the next three energy years, including operation and maintenance expenses, fuel expenses, including spent fuel expenses, non-fuel capital expenses, fully allocated overhead costs, the cost of operational risks and market risks that would be avoided by ceasing operations, and any other information, financial or otherwise, to demonstrate that the nuclear power plant’s fuel diversity, air quality, and other environmental attributes are at risk of loss because the nuclear power plant is projected to not fully cover its costs and risks, or alternatively is projected to not fully cover its costs and risks including its risk-adjusted cost of capital. For purposes of this subsection, “operational risks” shall include, but need not be limited to, the risk that operating costs will be higher than anticipated because of new regulatory mandates

or equipment failures and the risk that per megawatt-hour costs will be higher than anticipated because of a lower than expected capacity factor, and "market risks" shall include, but need not be limited to, the risk of a forced outage and the associated costs arising from contractual obligations, and the risk that output from the nuclear power plant may not be able to be sold at projected levels. An application submitted to the board pursuant to subsection c. of this section shall also include a certification that the nuclear power plant will cease operations within three years unless the nuclear power plant experiences a material financial change, and the certification shall specify the necessary steps required to be completed to cease the nuclear power plant's operations.

The financial and other information required pursuant to this subsection may be submitted on a confidential basis and shall be treated and maintained as confidential by the board and shall not be subject to public disclosure, notwithstanding any law to the contrary, including the common law. The board and the Attorney General shall jointly approve the disclosure of such confidential information to a party that they deem essential to aid the board in making the determinations required under this subsection, provided that the party is not in a position such that disclosure could harm competition and the party agrees in writing to maintain the confidentiality of the confidential information.

b. Notwithstanding any law, rule, regulation, or order to the contrary, the board shall complete a proceeding no later than 180 days after the date of enactment of this act to allow for the commencement of a program allowing for the issuance by the board of a zero emission certificate. In this proceeding, the board shall adopt, after notice, the opportunity for comment, and public hearing, an order establishing a ZEC program for selected nuclear power plants which shall include, but need not be limited to:

(1) a method and application process for determination of the eligibility and selection of nuclear power plants; and

(2) establishment of a mechanism for each electric public utility to purchase ZECs from selected nuclear power plants and a mechanism for the board to effectuate the provisions of subsection i. of this section.

c. No later than 210 days after the date of enactment of this act, a nuclear power plant seeking to participate in the program established by this act shall submit its application to the board.

d. Notwithstanding any law, rule, regulation, or order to the contrary, the board shall complete a proceeding no later than 330 days after the date of enactment of this act and shall adopt, after notice, the opportunity for comment, and public hearing, an order establishing a rank-ordered list of the nuclear power plants eligible to be selected to receive ZECs, and establishing which eligible nuclear power plants have been selected to receive ZECs pursuant to this section. If the board determines, in its discretion, that no nuclear plant that applies pursuant to subsection c. of this section satisfies the objectives of this act, then the board shall be under no obligation to certify any nuclear power plant as an eligible nuclear power plant.

e. To be certified by the board as an eligible nuclear power plant, a nuclear power plant shall:

(1) be licensed to operate by the United States Nuclear Regulatory Commission by the date of enactment of this act and through 2030 or later;

(2) demonstrate to the satisfaction of the board that it makes a significant and material contribution to the air quality in the State by minimizing emissions that result from electricity consumed in New Jersey, it minimizes harmful emissions that adversely affect the citizens of the State, and if the nuclear power plant were to be retired, that that retirement

would significantly and negatively impact New Jersey's ability to comply with State air emissions reduction requirements;

(3) demonstrate to the satisfaction of the board, through the financial and other confidential information submitted to the board pursuant to subsection a. of this section, and any other information required by the board, which information may be submitted on a confidential basis and shall be treated and maintained as confidential by the board and shall not be subject to public disclosure, notwithstanding any law to the contrary, including the common law, that the nuclear power plant's fuel diversity, air quality, and other environmental attributes are at risk of loss because the nuclear power plant is projected to not fully cover its costs and risks, or alternatively is projected to not cover its costs including its risk-adjusted cost of capital, and that the nuclear power plant will cease operations within three years unless the nuclear power plant experiences a material financial change;

(4) certify annually that the nuclear power plant does not receive any direct or indirect payment or credit under a law, rule, regulation, order, tariff, or other action of this State or any other state, or a federal law, rule, regulation, order, tariff, or other action, or a regional compact, despite its reasonable best efforts to obtain any such payment or credit, for its fuel diversity, resilience, air quality or other environmental attributes that will eliminate the need for the nuclear power plant to retire, except for any payment or credit received under the provisions of this act; and

(5) submit an application fee to the board in an amount to be determined by the board, but which shall not exceed \$250,000, to be used to defray the costs incurred by the board to administer the ZEC program.

f. In ranking eligible nuclear power plants from first to last, the board shall consider how well the nuclear power plants satisfy the criteria set forth under the provisions of this act, and shall also consider other relevant factors such as sustainability or long-term commitment to nuclear energy production in a manner that supports New Jersey's cost-effective transition to a zero carbon energy supply. Two or more eligible nuclear power plants shall not have the same ranking.

g. (1) The board shall select eligible nuclear power plants to receive ZECs according to their ranking. Beginning with the top-ranked eligible nuclear power plant and continuing in rank order, the board shall continue to select nuclear power plants but not beyond the point at which the combined number of megawatt-hours of electricity produced in the energy year immediately prior to the date of enactment of this act by all selected nuclear power plants equals 40 percent of the total number of megawatt-hours of electricity distributed by electric public utilities in the State in the energy year immediately prior to the date of enactment of this act. The board shall not select an eligible nuclear power plant to receive ZECs if the addition of the electricity produced by that nuclear power plant in the energy year immediately prior to the date of enactment of this act to the electricity produced in the energy year immediately prior to the date of enactment of this act by the selected nuclear power plants ranked ahead of that plant on the rank-ordered list exceeds 40 percent of the total number of megawatt-hours of electricity distributed by electric public utilities in the State in the energy year immediately prior to the date of enactment of this act.

(2) A selected nuclear power plant shall be eligible to receive ZECs 330 days after the date of enactment of this act. In the first energy year in which an eligible nuclear power plant is selected, the selected nuclear power plant shall receive a number of ZECs equal to the number of megawatt-hours of electricity it produced in that energy year starting on the date of the eligible nuclear power plant's selection. In each energy year thereafter, each

selected nuclear power plant shall receive a number of ZECs equal to the number of megawatt-hours of electricity that it produced in that energy year.

h. (1) Selected nuclear power plants shall initially receive ZECs for an eligibility period that shall run through the end of the first energy year in which the nuclear power plant is selected, plus an additional three energy years.

(2) No later than 13 months prior to the conclusion of the initial eligibility period established pursuant to paragraph (1) of this subsection, and no later than 13 months prior to the conclusion of each three energy year eligibility period thereafter, a nuclear power plant may demonstrate its eligibility to the board and the board may certify the nuclear power plant's eligibility to receive ZECs for additional eligibility periods of three energy years, consistent with the provisions of this act.

(3) A selected nuclear power plant shall annually certify to the board that it will continue operations at full or near full capacity for the duration of the period of its eligibility to receive ZECs, except with respect to nuclear power plant shutdowns for necessary maintenance and refueling.

i. (1) The board shall determine the price of a ZEC each energy year by dividing the total number of dollars held by electric public utilities in the accounts established pursuant to paragraph (1) of subsection j. of this section at the end of the prior energy year by the greater of: 40 percent of the total number of megawatt-hours of electricity distributed by the electric public utilities in the State in the prior energy year, or the number of megawatt-hours of electricity generated in the prior energy year by the selected nuclear power plants.

(2) Each electric public utility in the State shall be required to begin to purchase ZECs on a monthly basis from each selected nuclear power plant with payment to follow within 90 days after the conclusion of the first energy year in which selected nuclear power plants receive ZECs and within 90 days after the conclusion of each subsequent energy year. The number of ZECs an electric public utility shall be required to purchase shall equal the total number of ZECs received by the selected nuclear power plants for the prior energy year pursuant to paragraph (2) of subsection g. of this section multiplied by the percentage of electricity distributed in the State by the electric public utility as compared to other electric public utilities in the State.

(3) To ensure that a selected nuclear power plant shall not receive double-payment for its fuel diversity, resilience, air quality, or other environmental attributes, the board shall annually determine the dollar amount received by the selected nuclear power plant in an energy year pursuant to a law, rule, regulation, order, tariff, or other action of this State or any other state, or a federal law, rule, regulation, order, tariff, or other action, or a regional compact referenced in paragraph (4) of subsection e. of this section. Notwithstanding paragraph (2) of this subsection, the number of ZECs purchased by each electric public utility from a selected nuclear power plant for an energy year shall be reduced by the number of ZECs equal in value to the dollar amount determined by the board in this paragraph, multiplied by the percentage of electricity distributed in the State by the electric public utility as compared to other electric public utilities in the State. To the extent that the board determines that a selected nuclear plant receives revenues for its fuel diversity, resilience, air quality, or other environmental attributes, the board shall immediately reduce the number of ZECs on a prospective basis consistent with the level of such revenues.

j. (1) The board shall order the full recovery of all costs associated with the electric public utility's required procurement of ZECs, and with the board's implementation of the ZEC program under this act, through a non-bypassable, irrevocable charge imposed on the electric public utility's retail distribution customers. Within 150 days after the date of

enactment of this act, each electric public utility shall file with the board a tariff to recover from its retail distribution customers a charge in the amount of \$0.004 per kilowatt-hour which reflects the emissions avoidance benefits associated with the continued operation of selected nuclear power plants. Within 60 days after the tariff filing required pursuant to this paragraph, after notice, the opportunity for comment, and public hearing, the board shall approve the tariff, provided that it is consistent with the provisions of this subsection. No later than the date of the board's order establishing the initial selected nuclear power plants to receive ZECs, each electric public utility shall implement the tariff and begin collecting from its retail distribution customers the approved charge. Revenues collected by the electric public utility from the non-bypassable, irrevocable charge shall be placed in a separate, interest-bearing account and shall be used solely to purchase ZECs, and to reimburse the board for reasonable, verifiable costs the board incurs to implement the ZEC program pursuant to this act to the extent the board's costs exceed the application fees collected by the board pursuant to paragraph (5) of subsection e. of this section.

(2) Notwithstanding any provision of this act to the contrary, an electric public utility shall not be required to purchase any additional number of ZECs if the cost of the additional number of ZECs exceeds the revenues deposited in the electric public utility's separate, interest-bearing account, created pursuant to paragraph (1) of this subsection, for that energy year, after subtracting the reasonable, verifiable costs incurred by the board during that energy year to implement the ZEC program pursuant to this section, which costs shall be remitted to the board from the ZEC fund each energy year in a manner to be determined by the board. Excess monies in an electric public utility's separate, interest-bearing account shall be refunded to its retail distribution customers at the end of each energy year.

(3) (a) Notwithstanding the provisions of paragraph (1) of this subsection, and to ensure that the ZEC program remains affordable to New Jersey retail distribution customers, the board may, in its discretion, reduce the per kilowatt-hour charge imposed by paragraph (1) of this subsection starting in the second three year eligibility period and for each subsequent three year eligibility period thereafter, provided that the board determines that a reduced charge will nonetheless be sufficient to achieve the State's air quality and other environmental objectives by preventing the retirement of the nuclear power plants that meet the eligibility criteria established pursuant to subsections d. and e. of this section.

(b) If the board reduces the per kilowatt-hour charge imposed by paragraph (1) of this subsection pursuant to subparagraph (a) of this paragraph, the reduction shall be applicable to the next eligibility period only and the board shall make its determination no later than 13 months prior to the start of that eligibility period. Within 30 days thereafter, each electric public utility shall file, in lieu of the tariff described in paragraph (1) of this subsection, a tariff consistent with the board's determination. Within 60 days after filing of the tariff, after notice, the opportunity for comment, and public hearing, the board shall approve the revised tariff, provided that it is consistent with the board's determination. The revised tariff shall take effect starting in the next eligibility period.

(c) If the board does not certify any nuclear power plants for a subsequent eligibility period pursuant to this act, the board may, in its discretion, reduce the per kilowatt-hour charge imposed pursuant to paragraph (1) of this subsection to ensure that the ZEC program remains affordable to New Jersey retail distribution customers in the final year of the first eligibility period, provided that the board determines that a reduced charge will nonetheless be sufficient to achieve the State's air quality and other environmental objectives by preventing the retirement of the nuclear power plants that meet the eligibility criteria established pursuant to subsections d. and e. of this section.

(d) For the second three energy year eligibility period, and every subsequent eligibility period thereafter, a selected nuclear power plant shall pay a renewal fee to the board in an amount to be determined by the board, but which shall not exceed \$250,000, to be used to defray the costs incurred by the board to administer the ZEC program.

k. (1) A selected nuclear power plant shall be excused from performance, including but not limited to the sale of ZECs, and a payment from an electric public utility shall not be due to the selected nuclear power plant, if:

(a) the selected nuclear power suspends or ceases operations, despite the selected nuclear power plant's reasonable efforts to continue operations, due to an event beyond its control, including but not limited to acts of God, flood, drought, earthquake, storm, fire, lightning, epidemic, war, riot, labor dispute, labor or material shortage, sabotage, or explosion. The selected nuclear power plant shall no longer be excused from performance, and a payment from an electric public utility shall be due, after conclusion of the event;

(b) a State law is enacted imposing a significant new tax, special assessment, or fee on the generation of electricity, the ownership or leasehold of a generating unit, or the privilege or occupation of the generation, ownership, or leasehold of generation units by a selected nuclear power plant;

(c) a State or federal law is enacted that materially reduces the value of a ZEC, or the board exercises its discretion to reduce the amount of the per kilowatt-hour charge pursuant to paragraph (3) of subsection j. of this section;

(d) the selected nuclear power plant requires capital expenditures in excess of \$40,000,000 that were neither known nor reasonably foreseeable at the time it was selected to receive ZECs, and the capital expenditures are expenditures that a prudent owner or operator of a selected nuclear power plant would not undertake; or

(e) The United States Nuclear Regulatory Commission terminates the selected nuclear power plant's license.

(2) If a selected nuclear power plant ceases operations during an eligibility period for any reason other than those specified in this subsection, the selected nuclear power plant shall pay a charge to the electric public utilities that purchased ZECs from the selected nuclear power plant in an amount equal to the compensation received for the sale of ZECs since the board's last determination of the selected nuclear power plant's eligibility to receive ZECs. An electric public utility shall provide a refund to its retail distribution customers in an amount equal to the charge paid by a selected nuclear power plant to the electric public utility pursuant to this paragraph.

(3) The owner of a selected nuclear power plant shall, within two years after receiving ZECs, submit a plan to the board to retain, retrain, or compensate personnel whose employment would be eliminated as a direct result of the cessation of the selected nuclear power plant's operations, including an alternative economic development plan for communities that rely on the selected nuclear power plant for a substantial portion of their tax revenues.

l. A selected nuclear power plant shall not lay off any personnel unless the lay-off is due to employee misconduct or underperformance issues, or due to the suspension or cessation of the selected nuclear power plant's operations as provided in subsection k. of this section.

m. The owner of a selected nuclear power plant shall, within two years after receiving ZECs, conduct a study and prepare a written report in cooperation with selected experts, to determine the optimal use of dry cask storage of spent nuclear fuel at its site, considering environmental impacts, worker safety, and cost impacts.

C.48:3-87.6 Study by BPU to evaluate efficacy of program.

4. a. No later than 10 years after the date of enactment of this act, the Board of Public Utilities shall conduct a study to evaluate the efficacy of the zero emission certificate program and submit a written report thereon to the Governor and, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), to the Legislature. In conducting the study, the board shall evaluate the program's effect on the premature retirement of nuclear power plants, its effect on the air quality and environment in the State, and its contribution to a more reliable energy supply by assuring fuel diversity. The study shall also evaluate the program's benefits and costs to ratepayers.

b. The written report shall: (1) summarize the study and analysis conducted pursuant to subsection a. of this section; (2) discuss and quantify the potential benefits and costs associated with the program; (3) recommend any changes to the program or whether it should continue; and (4) recommend whether the program should be expanded to include other technologies.

C.48:3-87.7 Severability.

5. If any provision of this act or its application to any person or circumstance is held invalid or unconstitutional, that judgment or decision shall not affect other provisions or applications of this act which can be given effect without the invalid or unconstitutional provision or application, and to this end the provisions of this act are severable.

6. This act shall take effect immediately.

Approved May 23, 2018.